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PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)

12452ROUS02U

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on **September 21, 2006**Signature **/Bruce E. Garlick, 36,520/**Typed or printed name **Bruce E. Garlick, 36,520**

Application Number

09/833,864

Filed

4/12/2001

First Named Inventor

Mo-Han Fong

Art Unit

2616

Examiner

Jason E. Mattis

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

- ☐ applicant/inventor.
- ☐ assignee of record of the entire interest.
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/96)

☒ attorney or agent of record. **36,520**
Registration number _____

☐ attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34 _____

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512-264-88166

Telephone number

September 21, 2006

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.
Submit multiple forms if more than one signature is required, see below*.

☐ *Total of **1** forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Mo-Han Fong et al.

Serial No: 09/833,864

Filing Date: 4/12/2001

Title: DISTRIBUTED BUFFER MANAGEMENT IN A HIGH DATA RATE
WIRELESS NETWORK

Examiner: Jason E. Mattis

Art Group: 2616

Docket No: 12452ROUS02U

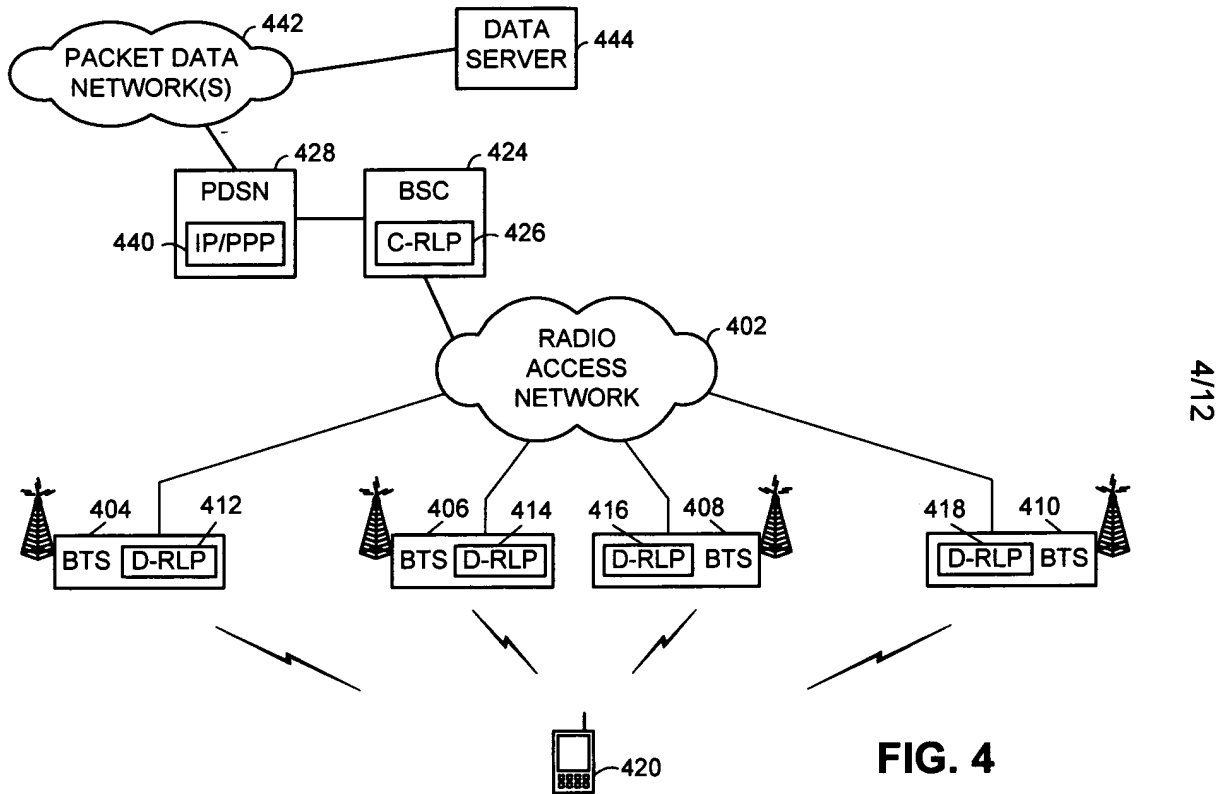
REQUEST FOR REVIEW OF FINAL OFFICE ACTION

5 A Final Office Action was mailed July 25, 2006 rejecting all of pending claims 1-20
Claims 1-5 and 13-17 were rejected under 35 U.S.C. 103(1) as being unpatentable over Haumont
et al. (U.S. Publication US 2001/0012279 A1 "Haumont") in view of Kim (U.S. Patent No.
6,052,713) and Farley et al. (U.S. Patent No. 6,553,032 "Farley"). Claims 6-7 were rejected
under 35 U.S.C. 103(a) as being unpatentable over Haumont in view of Kim and Farley as
10 applied to claims 1-5 and 13-17 and in further view of Strawczynski et al. (U.S. Application No.
09/835,102 "Strawczynski"). Claims 8, 11-12 and 18-19 were rejected under 35 U.S.C. 103(a)
as being unpatentable over Haumont in view of Kim. Claims 9-10 were rejected under 35 U.S.C.
103(a) as being unpatentable over Haumont in view of Kim as applied to claims 8, 11-12, and
18-19, and further in view of Kumar et al. (U.S. Patent No. 6,507,572 "Kumar"). Claim 20 was
15 rejected under 35 U.S.C. 103(a) as being unpatentable over Haumont in view of Kim as applied
to claims 8, 11-12, and 18-19, and in further view of Strawczynski.

Teachings of the Invention as Claimed

Independent claim 1 is directed to a "method of operating a wireless communication
system to service high data rate forward link transmissions for a mobile station." Independent
20 claims 8 and 13 are directed to "managing the contents of a plurality of data buffers in a wireless
communication system to service forward link data transmissions for a mobile station."
Independent claim 18 is directed to a base station controller. Generally, each of these

independent claims includes elements for managing contents of a central buffer and a plurality of distributed buffers. An example of a system of the present invention is illustrated in FIG. 4 of the present application (reproduced below).



With the system of FIG. 4, a central buffer (C-RLP) 426 resides in BSC 424 and each of a plurality of distributed buffers (D-RLP) 412, 414, 416, and 418 reside within active base stations 404, 406, 408, and 410, respectively. According to each of independent claims 1, 8, 13, and 18 a group of blocks of data are first downloaded to the central buffer 426. Then a plurality of blocks of data of the group of blocks of data are downloaded from the central buffer 426 to each distributed buffer 412, 414, 416, and 418. Data blocks are then transmitted from one or more servicing base stations 404, 406, 408, and 410 to the mobile station 420. When data refresh is required by one of the serving base stations, a next plurality of blocks of data of the

group of blocks of data is downloaded from the central buffer to **each** of the plurality of distributed buffers of the active set of base stations servicing the mobile station. Determining when refresh is required may be based upon the sequence number of successfully transmitted data blocks. In any case, during refresh, each of the plurality of distributed buffers 412, 414, 416, and 418 receive copies of the same blocks of data. Using these refresh techniques, a continual stream of data blocks is available for transmission to a mobile station 420 from any of the active set of base stations 404, 406, 408, and 410.

Independent claims 1-20 are not rendered obvious by the cited references

The cited references do not disclose all elements of pending claims 1-20.

Haumont, which serves as the primary reference for all rejections and discloses a first embodiment having distributed buffers in a plurality of base station.. (see page 4, paragraph [0049]) Haumont further discloses a second embodiment having a central buffer located in a base station controller (see page 6, paragraph [0079]). Haumont fails to disclose a system having both a central buffer in the base station controller and distributed buffers in a plurality of base stations serviced by the base station controller. Haumont further fails to disclose, for each of an active set of base stations, downloading a plurality of blocks of data of the group of blocks of data from a central buffer to a respective distributed buffer of the base station. Haumont also fails to disclose downloading a next plurality of blocks of data of the group of blocks of data from a central buffer to the respective distributed buffer of each base station of the active set of base stations. The Office Action concedes that Haumont, Farley, Strawczynski, Padovani, and Kumar fail to disclose both a central buffer and a plurality of distributed buffers.

The Office Action cites Kim as meeting the claim elements missing from Haumont, Farley, Strawczynski, Padovani, and Kumar. This citation is incorrect. The background section of Kim (col. 1, lines 15-63), states that programs and data are downloaded from a main processor

of a Base Station Manager (BSM) to a medium processor of a Base Station Controller (BSC) and from the medium processor of the BSC to sub processors of respective Base station Transceiver Subsystems (BTSS). The Office Action states that this section of Kim discloses the central buffer and distributed buffer of the claims of the present invention. The Office Action infers
5 teachings to Kim that Kim simply does not disclose. The teachings of prior art references must be evident and explicit, not inferred or missing as is the case here. The BSM described in the background section of Kim manages individually each sub processor. A more reasonable interpretation of the background section of Kim is that different data and programming would be transmitted by the main processor or medium processor to each sub processor for assignment of
10 resources.

The Office Action also cites Kim at col. 3, line 50, to col. 4, line 23, as teaching the central buffer/distributed buffers elements of claims 1, 8, 13, and 18. A careful reading of these portions of Kim shows that Kim addresses the **uploading** of data from the sub processors of the BTSS to the main processor of the BSS **not** the **downloading** of data from a central buffer to
15 distributed buffers. The summary of the invention of Kim (col. 2, lines 15-31) explicitly states that the objects of the invention relate to the receipt and storage of data from a plurality of sub processors by a main processor. Figures 2-5 of Kim and related text at col. 4, line 27 to col. 6, line, 12, describes how data from the sub processors (BTSS) is uploaded, processed, and stored by the single main processor (BSC). In particular, referring to FIG. 2, sub processors (211, 212,
20 213) that resident in respective BTSS transfer data to components of a BSC (control process 220, buffering process 230, ready queue 260, storing process 240, and database 250).

The claims of the present invention address methods and structure for servicing forward link transmissions for a mobile station. Kim fails to teach or suggest: (1) downloading a group

of blocks of data to a central buffer that services the active set of base stations; (2) for each of the active set of base stations, downloading a plurality of blocks of data of the group of blocks of data from the central buffer to a respective distributed buffer of the base station; and (3) downloading a next plurality of blocks of data of the group of blocks of data from a central
5 buffer to the respective distributed buffer of each base station of the active set of base stations as required by independent claims 1, 8, 13, and 18.

Thus, the cited references fail to disclose, suggest, or teach all of the elements of independent claims 1, 8, 13, and 18, and for this reason, these claims are not obvious over the cited references. All other pending claims depend from one of claims 1, 8, 13, or 18 and are not
10 rendered obvious by the cited references.